

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior listings of versions of claims in this application:

Claim 1 (currently amended): A method for the preparation of a platinum(II) complex containing a neutral bidentate ligand, the method ~~comprising including~~ the step of reacting a *bis*-dicarboxylatoplatinate(II) species with a neutral bidentate ligand to form a neutral dicarboxylatoplatinum(II) complex product containing a neutral bidentate ligand; ~~and, if necessary, recrystallising the product to form a pure dicarboxylatoplatinum(II) complex containing a neutral bidentate ligand.~~

Claim 2 (original): The method according to claim 1, wherein the *bis*-oxalatoplatinate(II) species and ligand are reacted at a temperature of 40°C to 100°C for a period of 0.5 to 3 hours.

Claim 3 (original): The method according to claim 2, wherein the *bis*-oxalatoplatinate(II) species and ligand are reacted at a temperature of approximately 95°C.

Claim 4 (original): The method according to claim 2, wherein the *bis*-oxalatoplatinate(II) species and ligand are reacted for approximately 1 hour.

Claim 5 (original): The method according to claim 1, wherein dicarboxylatoplatinate(II) species contaminating the product are removed from the product by dissolving the product in distilled water and adding an oxalate which transforms the dicarboxylatoplatinate(II) species into a species that can be separated from the dissolved product by filtration.

Claim 6 (original): The method according to claim 5, wherein the oxalate is $\text{Cs}_2\text{C}_2\text{O}_4$.

Claim 7 (original): The method according to claim 1, wherein the neutral bidentate ligand is an amine.

Claim 8 (original): The method according to claim 7, wherein the amine is a diamine.

Claim 9 (original): The method according to claim 8, for the preparation of chemically and optically pure oxaliplatin, wherein the ligand is optically pure trans-1-1,2-diaminocyclohexane.

Claim 10 (original): The method according to claim 1, wherein the neutral bidentate ligand contains donor atoms other than N, or N together with a donor atom other than N.

Claim 11 (original): The method according to claim 10, wherein the donor atom/s other than N are selected from S and Se.

Claim 12 (original): The method according to claim 11, wherein the neutral bidentate ligand is a neutral bidentate heterocyclic amine with an S donor atom.

Claim 13 (original): The method according to claim 12, wherein the neutral bidentate heterocyclic amine includes thioetherial S.

Claim 14 (original): The method according to claim 13, wherein the neutral bidentate ligand is a 1-alkyl/aryl-2-alkylthioalkyl/aryl heterocyclic amine.

Claim 15 (original): The method according to claim 14, wherein the heterocyclic amine is an imidazole or pyridine.

Claim 16 (original): The method according to claim 15, wherein the neutral bidentate ligand is:

- | | |
|-------------|---------------------------------------|
| Ligand (i) | 1-methyl-2-methylthioethylimidazole, |
| Ligand (ii) | 1-methyl-2-methylthiopropylimidazole, |

- Ligand (iii) 1-butyl-2-methylthiomethylimidazole,
Ligand (iv) 1-methyl-2-methylthiomethylimidazole,
Ligand (v) 1-butyl-2-methylthioethylimidazole,
Ligand (vi) 2-methylthiomethylpyridine,
Ligand (vii) 2-methylthioethylpyridine, or
Ligand (viii) 2-methylthiopropylpyridine.

Claim 17 (original): The method according to claim 10, wherein the neutral bidentate ligand is an aminoalkylthioalkyl/aryl compound.

Claim 18 (original): The method according to claim 17, wherein the neutral bidentate ligand is:

- Ligand (ix) 1-amino-2-thiomethylethane, or
Ligand (x) 1-amino-2-thioethylethane.

Claim 19 (original): The method according to claim 10, wherein the neutral bidentate ligand is a dithioether.

Claim 20 (original): The method according to claim 19, wherein the neutral bidentate ligand is Ligand (xi) 2,5-dithiahexane.

Claim 21 (original): The method according to claim 10, wherein the neutral bidentate ligand is a diseleno ether.

Claim 22 (original): The method according to claim 21, wherein the neutral bidentate ligand is Ligand (xii) 2,5-diseleno hexane.

Claim 23 (original): An oxalatoplatinum(II) complex containing a neutral bidentate ligand having a heterocyclic amine with a thioetheral S donor atom.

Claim 24 (original): Oxalato(1-methyl-2-methylthioethylimidazole)platinum(II).

Claim 25 (original): Oxalato(1-methyl-2-methylthiopropylimidazole)platinum(II).

Claim 26 (original): Oxalato(1-butyl-2-methylthiomethylimidazole)platinum(II).

Claim 27 (original): Oxalato(1-methyl-2-methylthiomethylimidazole)platinum(II).

Claim 28 (currently amended): ~~Oxalato(1-butyl-2-methylthioethylimidazole)platinum(II)~~ Oxalato(1-butyl-2-methylthioethylimidazole)platinum(II).

Claim 29 (original): Oxalato(2-methylthiomethylpyridine)platinum(II).

Claim 30 (original): Oxalato(1-amino-2-thioethylpyridine)platinum (II).

Claim 31 (original): Oxalato(1-amino-2-thiopropylpyridine)platinum (II).

Claim 32 (original): Oxalato(1-amino-2-thiomethylethane)platinum(II).

Claim 33 (original): Oxalato(1-amino-2-thioethylethane)platinum(II).

Claim 34 (original): Oxalato(2,5-dithiahexane)platinum(II).

Claim 35 (original): Oxalato(2,5-diseleno hexane)platinum(II).

Claim 36 (currently amended): A method of treating cancer in a patient, the method ~~including comprising~~ administering a therapeutically effective amount of the an oxalatoplatinum(II) complex ~~of as defined in claim 23 to a~~ the patient in need thereof.

Claim 37 (canceled)

Claim 38 (canceled)

Claim 39 (currently amended): An oxalatoplatinum(II) complex product selected from the group consisting of

oxalato(1-methyl-2-methylthioethylimidazole)platinum(II),
oxalato(1-methyl-2-methylthiopropylimidazole)platinum(II),
oxalato(1-butyl-2-methylthiomethylimidazole)platinum(II),
oxalato(1-methyl-2-methylthiomethylimidazole)platinum(II),
oxalato(1-butyl-2-methylthioethylimidazole)platinum(II),
oxalato(2-methylthiomethylpyridine)platinum(II),
oxalato(1-amino-2-thioethylpyridine)platinum(II),
oxalato(1-amino-2-thiopropylpyridine)platinum(II),
oxalato(1-amino-2-thiomethylethane)platinum(II),
oxalato(1-amino-2-thioethylethane)platinum(II),
oxalato(2,5-dithiahexane)platinum(II),
oxalato(2,5-diseleno hexane)platinum(II), and
oxaliplatin,
wherein the product contains ~~containing~~ no traces of silver.

Claim 40 (currently amended): A method for producing a *bis*-dicarboxylatoplatinum(II) *bis*-oxalatoplatinum(II) species, the method including comprising the step of either reacting a platinum(II) compound or reacting a platinum(IV) compound with an oxalate at a high mole ratio of greater than 1:4.

Claim 41 (original): The method according to claim 40, wherein the platinum(II) or platinum(IV) compound and oxalate salt are reacted at a high mole ratio of 1:8 or greater.

Claim 42 (original): The method according to claim 41, wherein the platinum(II) or platinum(IV) compound and oxalate are reacted at a high mole ratio of 1:16 or greater.

Claim 43 (original): The method according to claim 42, wherein the platinum(II) or platinum(IV) compound and oxalate are reacted at a high mole ratio of 1:24 or greater.

Claim 44 (original): The method according to claim 40, wherein the platinum(II) compound is K_2PtX_4 where X is a halide.

Claim 45 (original): The method according to claim 40, wherein the platinum(IV) compound is K_2PtX_6 where X is a halide.

Claim 46 (original): The method according to claim 44, wherein X is Cl.

Claim 47 (original): The method according to claim 45, wherein the platinum(IV) compound is reduced to platinum(II) by the oxalate.

Claim 48 (original): The method according to claim 45, wherein the platinum(IV) compound is reduced by SO_2 or sulfite.

Claim 49 (original): The method according to claim 40, wherein the oxalate is $K_2C_2O_4$.

Claim 50 (original): The method according to claim 40, wherein the platinum(II) *bis*-oxalato species is $K_2Pt(C_2O_4)_2 \cdot 2H_2O$.

Claim 51 (original): The method according to claim 40, wherein the platinum(II) compound or platinum(IV) compound and oxalate are reacted at a temperature of from 40°C to less than 100°C for a period of 0.5 to 4 hours.

Claim 52 (original): The method according to claim 51, wherein the platinum(II) compound or platinum(IV) compound and oxalate are reacted at a temperature of approximately 95°C.

Claim 53 (original): The method according to claim 51, wherein the platinum(II) compound or platinum(IV) compound are reacted for approximately 1 hour.

Claim 54 (original): The method according to claim 45, wherein X is Cl.

Claim 55 (new): The method according to claim 1, further comprising the step of recrystallizing the neutral dicarboxylatoplatinum(II) complex product to form a pure dicarboxylatoplatinum(II) complex containing a neutral bidentate ligand.

Claim 56 (new): The method according to claim 55, wherein the *bis*-oxalatoplatinate(II) species and ligand are reacted at a temperature of 40°C to 100°C for a period of 0.5 to 3 hours.

Claim 57 (new): The method according to claim 55, wherein dicarboxylatoplatinate(II) species contaminating the product are removed from the product by dissolving the product in distilled water and adding an oxalate which transforms the dicarboxylatoplatinate(II) species into a species that can be separated from the dissolved product by filtration.

Claim 58 (new): The method according to claim 55, wherein the neutral bidentate ligand is an amine.

Claim 59 (new): The method according to claim 55, wherein the neutral bidentate ligand contains donor atoms other than N, or N together with a donor atom other than N.

Claim 60 (new): An oxaliplatin product containing no traces of silver.